

## CLAIMS

1. A catalytic converter unit comprising:

a wall means defining a treatment zone, first and second transfer zones and at least one through-flow zone, wherein the zones are adjacent each other, the wall means includes a partition wall that divides the treatment zone into first and second segments, the first transfer zone is plugged upstream of the partition wall and the second transfer zone is plugged downstream of the partition wall, and

a catalytic converter element disposed in the first segment of the treatment zone, spaced from the partition wall,

and wherein the first segment of the treatment zone is in flow communication with the first transfer zone and the second segment of the treatment zone is in flow communication with the second transfer zone.

2. A catalytic converter unit according to claim 1, wherein the wall means comprises a wall that bounds the treatment zone and has portions that bound the transfer zones and the through-flow zone or zones respectively.

3. A catalytic converter unit according to claim 2, wherein the treatment zone is surrounded laterally by the transfer zones and the through-flow zone or zones.

4. A catalytic converter unit according to claim 3, wherein the transfer zones are separated laterally by a common partition wall.

5. A catalytic converter unit according to claim 1, wherein the catalytic converter unit is an elongate unit having an inlet end, for receiving gas to be treated, and an opposite outlet end, the zones each extend from the inlet end to the outlet end, the first segment of the treatment zone is upstream of the second segment of the treatment zone with respect to flow from the inlet end of the catalytic converter unit towards the outlet end thereof, the first transfer zone

is plugged at a location that is upstream of the partition wall in the treatment zone, and the second transfer zone is plugged at a location that is downstream of the partition wall in the treatment zone.

6. A catalytic converter unit according to claim 5, wherein the wall means comprises an inner wall that bounds the treatment zone, an outer wall through which the inner wall extends in substantially coaxial relationship, whereby a substantially annular space is defined between the inner and outer walls, and a plurality of radial walls divide the annular space into sectors that form, respectively, the transfer zones and the through-flow zone or zones.

7. A catalytic converter unit according to claim 6, wherein the radial walls are substantially equiangularly distributed in the annular space.

8. A catalytic converter unit according to claim 7, wherein the wall means comprises at least four radial walls and one of the radial walls bounds both the first transfer zone and the second transfer zone.

9. A catalytic converter unit according to claim 6, wherein the inner wall is formed with a first opening that is downstream of the catalytic converter element and upstream of the partition wall and provides communication between the first segment of the treatment zone and the first transfer zone, and with a second opening that provides communication between the second segment of the treatment zone and the second transfer zone.

10. A catalytic converter unit according to claim 1, wherein the first and second transfer zones are plugged substantially at opposite respective ends thereof.

11. A catalytic converter apparatus having an inlet end and an outlet end, the catalytic converter apparatus including:

a plurality of catalytic converter elements, and  
a wall means defining a treatment zone having a plurality of successive longitudinal segments in which the catalytic converter elements are respectively disposed, and gas feed zones arranged about the segments of the treatment zone for conducting gas to the segments of the treatment zone.

12. A catalytic converter apparatus according to claim 11, wherein at least one of the gas feed zones is plugged at a location between the inlet end and the outlet end, and a segment of the treatment zone is connected to said one gas feed zone both upstream and downstream of the plug for bypassing the plug.

13. A catalytic converter apparatus according to claim 11, wherein the treatment zone is disposed substantially centrally in the apparatus and the gas feed zones surround the treatment zone.

14. A catalytic converter apparatus according to claim 13, wherein the wall means includes an inner wall of circular cross section defining the treatment zone and an outer wall of circular cross section located coaxially around the inner wall and spaced therefrom, and the gas feed zones are defined by sectors between the inner and outer walls.

15. A catalytic converter apparatus including a plurality of catalytic converter units connected end-to-end between an inlet end of the apparatus and an outlet end thereof, each catalytic converter unit comprising:

a wall means defining a treatment zone, first and second transfer zones and at least one through-flow zone, wherein the zones are adjacent each other, the wall means includes a partition wall that divides the treatment zone into first and

second segments, the first transfer zone is plugged upstream of the partition wall and the second transfer zone is plugged downstream of the partition wall, and

a catalytic converter element disposed in the first segment of the treatment zone, spaced from the partition wall,

and wherein the first segment of the treatment zone is in flow communication with the first transfer zone and the second segment of the treatment zone is in flow communication with the second transfer zone.

16. A catalytic converter apparatus according to claim 15, wherein the catalytic converter units are substantially cylindrical and, in each pair of converter units composed of an upstream unit and an adjacent downstream unit, the first transfer zone of the upstream unit is aligned with a through-flow zone of the downstream unit and the second transfer zone of the upstream unit is aligned with the first transfer zone of the downstream unit.